

BEDNAR, J., PhMr. (Praha 1, Narodni tr. 8); BERGMANNOVA, E.; ROHLING, S.

Contribution to the determination of serum iodine soluble in
butanol. Cesk. farm. 14 no.7:351-355 S '65.

1. Vyzkumny ustav endokrinologicky, Praha.

Bednar, J.

Colorimetric Determination of 3-(1-phenylpropyl)4-hydroxycoumarin. J. Bednar (Sktl. instav kaučuky) XVII

Prague, Czechoslovakia, 7/1956. - The detn. is based on the reaction of 3-(1-phenylpropyl)-4-hydroxycoumarin (Marcoumar) I with diazotized 4-nitroaniline. The procedure is as follows: Heat one tablet contg. about 3 mg. 10 min. on a steam bath in a volumetric flask with about 12.5 ml. of 10% soln. of NH₂OAc. Then cool the soln. and dil. to 25 ml. with NH₂OAc soln. After filtration add 2 ml. of freshly prep'd. soln. of diazotized 4-nitroaniline to 5 ml. of the eluate, and allow the mixt. to stand for 20 min. at room temp. After acidification with 1 ml. concd. HCl, ext. the azo dye with 10 ml. of benzene. Dry the benzene soln. with Na₂SO₄, and measure the color with a Fullrich photometer with blue filter S 47. The result is accurate to within 5%.

K. Mack

RM

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204130002-9

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CIA-RDP86-00513R000204130002-9"

CZECHOSLOVAKIA

JANOVSKY, I; BARTONICEK, B; BEDNAR, J.

Institute of Nuclear Research of the Czechoslovak
Academy of Sciences, Rez by Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications,
No 8, 1963, pp 2245-2246

"On the Use of Liquid Formic Acid Solution as a Chemical
§ Dosimeter."

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and Their Application. Carbohydrates and Their Processing. II.

Abs Jour : ; Ref Zbir - Khiniya, № 10, 1959, 36742

Author : Salac, V., Vaneura, M., Bednar, J.

Inst : -

Title : A Comparison Between Czechoslovak Hop Extracts with Those of Other Countries.

Orig Pub : Kvasny prumysl, 1958, 4, № 7, 146-143.

Abstract : The effect of the substitution of hops by hop extracts (HE) on the quality of wort and beer has been clarified. The Czechoslovak HE (CzSR-I and CzSR-II) were compared with those of FRG, GDR, England and USA. CzSR-I was obtained by the extraction of the hops by an organic solvent and water; an organic solvent only was used in the preparation of CzSR-II, and, as a result, tanning agents were absent in them (as in the case of HE of GDR). A number of semi-industrial brewings in identical

Card 1/3

H-142

COUNTRY : CZECHOSLOVAKIA
CATEGORY : Chemical Technology. Chemical Products and
Their Applications. Fermentation Industry
ABS. JOUR. : RZKhim., No. 23 1959, No. 83795 H

AUTHOR : Klarar, G.; Bednar, J.

INST. : -
TITLE : Bottling Beer Hot

ORIG. PUB. : Kvasny prumysl, 1959, 5, No 1, 3-6

ABSTRACT : Filtered beer is sterilized in a leaf heater and without cooling is bottled employing a special valve and thoroughly washed (the presence of a smallest speck of dirt causes foaming) and heated, up to 40°, bottle of high strength (at a temperature of beer-65°, the bottle must be checked to withstand 6.1 atm. pressure, at 80° - 7.6 atm). As beer enters the bottle it flows along the bottle's internal walls and fills it up to a mark without foaming. A small air space increases stability

CARD: 1/2

BEDNAR, J.; VANCURA, M.

"Experiments with utilizing extracts of bitter-hop substances from sludge and brewery sediments." P. 105.

KVASNY PRUMYSL. (Ministerstvo potravinarskeho prumyslu). Praha,
Czechoslovakia, Vol. 5, No. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

VANCURA, Miloslav; HEDNAR, Jaromir

Effect of hop resins on the beer bitter. Kvasny prum 9
no. 5:110-112 My '63.

1. Vyakumny ustav pivovarsky a sladarsky, Praha.

VANCURA, Miroslav; BEDNAR, Jaromir

Changes in hop resins during hop storage and their effect
on the amount of bitter substances in beer. Kvasny prum
9 no. 12: 277-281 D '63.

1. Vyzkumny ustav pivovarsky a sladarsky, Praha.

Simple chemical dosimeter. Jiří Teply and Jaroslav Bednář (Ant. Zápotocky Military Tech. Acad., Brno, Czechoslovakia) *Zápravky* 4, 202-5 (1968). Said soln. of CHCl_3 in H_2O is proposed as a chem. dosimeter. The radiolysis product, HCl , is detd. by titration with $0.001N$ NaOH, or conductometrically. The soln. is stable and easily prep'd. It has been calibrated for γ -rays from Co^{60} , β from $\text{Sr}^{90} + \text{Y}^{90}$, and x-rays (150 kv. peak). The yield is independent of the radiation intensity within a wide range, and does not vary much with the nature of the radiation. The dosimeter can be used from 1000 to 40,000 r. H_2O .

14
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Rny2

CZECHOSLOVAKIA/Physical Chemistry - Radiation Chemistry. D
Photochemistry. Theory of the Photographic Process.

Abs Jour : Ref Zhur Khimiya, No 19, 1959, 67330

Author : Teply, Jiri; Bednar, Jaroslav

Inst : -

Title : Radiation Chemistry of an Aqueous Solution of Chloroform.

Orig Pub : Jaderna energie, 1958, 4, No 12, 389-390

Abstract : An aqueous solution of CHCl_3 (7×10^{-3} M) was irradiated with unfiltered x-rays, γ -rays of Co^{60} and β -rays of Si^{90} / y^{90} . The main reaction product was HCl. The end of the induction period the radiation chemical yield of HCl attained 26.6 ± 1.3 on x-ray irradiation, 25.8 ± 1.3 on γ -ray irradiation, and 24.4 ± 1.3 on β -ray irradiation. 3.9-4.7 molecules of HCl were given off per O_2 molecule consumed. The induction period depends on the reaction between the OH and CHCl_3 radicals ($\text{OH} + \text{CHCl}_3 = \text{H}_2\text{O} + \text{CCl}_3$). The HCl concentration is related

Card 1/2

- 27 -

BEDNAR, T.

✓ Effect of thallous ions on the reduction of Fe^{+++} with
x-rays. Jaroslav Bednář (A. Zápotocký Military Tech.,
Acad., Brno, Czech.). *Chem. listy* 52, 730-40 (1958);
Collection Czechoslov. *Chem. Commun.*, 24, 1006-7 (1959);
cf. Šworski, CA 50, 15244e.—The yield of Fe^{++} per 100
e.v. of x-ray energy absorbed in the irradiation of $\text{Fe}_3(\text{SO}_4)_2$
soln. in the presence of 2,2'-bipyridine is increased by the
presence of Tl_2SO_4 . This probably is due to the reactions
 $\text{Tl}^+ + \text{OH} \rightarrow \text{Tl}^{++} + \text{OH}^-$, $\text{Tl}^{++} + \text{Fe}^{+++} \rightarrow \text{Tl}^{+++} +$
 Fe^{++} . H. Newcomer

2

COUNTRY	: Czechoslovakia	b-1c
CATEGORY	Physical Chemistry--Radiation chemistry. Photo- chemistry. Theory of photographic process.	
ABS. JOUR.	RZKhim., No. 22 1959, No.	77869
AUTHOR	Bednar, J. and Teply, J.	
INST.	Not given	
TITLE	The Yield of Hydrogen Peroxide in Water Irradiated with X-rays	
ORIG. PUB.	Chem Listy, 52, No 6, 1028-1034 (1958); Collection Czechoslov Chem Commun, 24, No 1, 127-134 (1959)	
ABSTRACT	The authors have investigated the effect of x-rays (150 kev) on water and on aqueous KBr solutions (10^{-6} - 10^{-2} M), saturated with oxygen and free of CO_2 , both in acid medium and in neutral medium. The value of $G(\text{H}_2\text{O}_2)$ after irradiation with x-rays is greater than after irradiation with Co 60 gamma rays. $G(\text{H}_2\text{O}_2)$ decreases linearly with increasing [KBr]; the decreases is the more rapid, the higher the pH. The $G(\text{H}_2\text{O}_2)$ in neutral medium is higher than in acid medium. In water,	

CARD: 1/3

Bednar J.
COUNTRY : Czechoslovakia
CATEGORY : Physical Chemistry--Radiation chemistry. Photo-
chemistry. Theory of photographic process.
ABS. JOUR. : RZKhim., No. 14 1959, No. 48846

AUTHOR : Bednar, J.
INST. : Not given
TITLE : The Reduction of Fe(III) Ions by X-rays in the
Absence of Oxygen

ORIG. PUB. : Chem Listy, 52, No 7, 1222-1228 (1958)

ABSTRACT : The reduction of Fe(3+) ions in H₂SO₄ medium
in the presence of α , α' -dipyridyl and in
the absence of air is effected by H atoms and,
at higher pH's and in the presence of KBr, also
by the HO₂ radical. Under the above conditions
the α , α' -dipyridyl reacts with hydroxyl
radicals. The mechanism of the reaction is
discussed. KBr lowers the G yield [quantum
yield?] of Fe(2+) in 0.8 N H₂SO₄ as a result
of the reaction:

CARD: 1/2

A-50

COUNTRY	:	Czechoslovakia	B-10
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 14 1959, No.	48846
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	1.10 ⁻⁶ , 3.33; 1.10 ⁻³ , 3.01; 5.10 ⁻³ , 2.39; 1.10 ⁻³ , 1.87; 5.10 ⁻³ , 0.62; 1.10 ⁻³ , 0. The extrapolated G for Fe(2+) for a KBr concentration of zero coincides with the G of H atoms in the same medium.	
Z. Matousek			
CARD: 3/3			

R-571

BEDNAK, JAROSLAV

Radiation source containing 400 curies of cobalt-60.
Jaroslav Bednář, Arnošt Iljubi, and Miroslav Křivánek
(Antonín Zápotocký Military Acad., Brno, Czech.).
Jáderná energie 5, 405-8 (1959).—The equipment consists
of a movable carriage set into a concrete block. The source
inside the carriage can be set over the irradiation chamber in
the concrete block, accessible through a horizontal passage
and a side opening. The source is a Al cylinder contg. 32
pieces of Co⁶⁰ of ~13 c. each. The filling of the cylinder
and its placement in the carriage were carried out under H₂O.
H. Newcombe

5

COUNTRY	: Czechoslovakia	B-1C
CATEGORY	Physical Chemistry. Radiation Chemistry.	
	Photochemistry. Theory of the Photographic *	
ABS. JOUR.	RZKhim., No. 23 1959, No. 81460	
AUTHOR	Bednar, J.	
INST.	Not given	
TITLE	Effect of Monovalent Thallium Ions on the X-Ray Reduction of Fe ³⁺ .	
ORIG. PUB.	Collect. Czechosl. Chem. Commun., 1959, 24, #3, 1006-1007.	
ABSTRACT	See RZKhim, 1959, #5, 14716	
CARD: 1/1		
* Process		

COUNTRY : Czechoslovakia
CATEGORY :

D-9

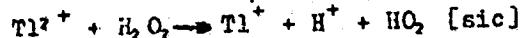
ABS. JOUR. : RZKhim, No. 5 1960, No.

16999

AUTHOR :
INST. :
TITLE :

CHIG. PUB. :

ABSTRACT : sence of these [sic] ions at the moment of mixing. This can be explained by the fact that in the presence of Tl ions a certain amount of H₂O₂ does not take part in the oxidation of Fe(2+). Tl(2+) ions are apparently formed in the course of the reaction, and these ions react with H₂O₂ according to the scheme:



In the presence of Fe(3+) a competition is set up between Fe(2+), Fe(3+), and Tl(2+) for the

CARDS: 2/3

Reactions of radicals in the presence of thallium(I) ions.
II. Use of thallium(I) sulfate in dosimeter with ferrous sulfate. L. Bednář (Vojenská akad., Brno). Collection Czechoslov. Chem. Commun. 24, 2803-7 (1959) (in German); cf. C.A. 53, 11081c.—Tl₂SO₄, 0.001 mole/l., added to an air-satd. soln. of FeSO₄ in 0.8N H₂SO₄, used as dosimeter shows a protective effect which is equal to that of NaCl in the presence of EtOH, but is superior in the case of nonsatd. compds. (here represented by CH₃:CH₂), and at the same time lacks some disadvantages of NaCl (cf. Dewhurst, C.A. 46, 5439f.). L. J. Urbánák.

4
AER
2-4E3C

Z/008/60/000/04/001/019
E034/E416

AUTHORS: Jaroslav Bednář and Miloslav Křivánek
TITLE: Radiation Chemistry Research in Czechoslovakia
PERIODICAL: Chemické listy, 1960, Nr 4, pp 323-331

ABSTRACT: The authors note that there are only four established sets of laboratories dealing with this type of work in Czechoslovakia and that international standards have not been achieved so far. However, the authors set out to review Czechoslovak literature up to the summer of 1959. Certain aspects of radiation chemistry theory have been covered in Ref 1 and 2, particularly with the kinetics of indirect radiation effects in dilute solutions (equations on p 323 and Eq. (1) and (2)). The study of the radiolysis of aqueous solutions of inorganic and organic substances also received attention (Ref 4); confirmation and extension of Ref 5 and 6 being achieved (cf Table I which gives decomposition yield produced by 150 kVp X-irradiation of water). Radiation reductions (Ref 7 to 13) and related reactions are covered in Eq (3) to (14). Both oxidation reactions (Ref 14) and reactions in concentrated solutions (Ref 15) have been the subject of

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E034/E416

Radiation Chemistry Research in Czechoslovakia

studies as have the radiation reactions of very dilute aqueous solutions of CHCl_3 and CCl_4 (Ref 2,13, 16 to 18 and Eq (15) to (18)). The effect of radiation on sulphur (Ref 19,20) and certain other amino-acids (Ref 21) has received attention and the protective effect of $-\text{NH}_2$ and $-\text{SH}$ group has been examined (Ref 22). The radiation chemistry of organic compounds such as ion-exchangers (Ref 23), high fatty acids and related compounds (Ref 24) as well as various polymers has been under consideration. The chemistry of high energy atoms (hot atoms) has attracted some attention (Ref 27 to 32) as has the concentration of ^{198}Au (Ref 25,26). The formation of radioactive isotopes and related topics have been investigated (Ref 33 to 35). Saturated aqueous solutions of chloroform have been used in chemical dosimetry (Ref 36 cf Table II - yields in chloroform dosimetry). Resazurine and some other compounds have been examined in chemical dosimetry (Ref 37,38,12). Radiation equipment and sources are also mentioned (Ref 39 to 42). Various reviews have appeared (Ref 43 to 52) in Czech and

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Radiation Chemistry Research in Czechoslovakia

the authors conclude with a critical appraisal of
Czechoslovak shortcomings in this field. There are
2 tables and 52 references, 44 of which are Czech,
3 English, 1 German and 4 Soviet.

ASSOCIATION: Vojenská akademie A. Zapotockého, Brno
(A. Zapotocky Military Academy, Brno)



Card 3/3

BEDNAR, JAROSLAV

Distr: 4E2c(j)/4E3d

¹
 "Effect of γ -radiation on some ion exchangers." Miroslav Pešek, Miloslav Křivánek, and Jaroslav Bednář (A. Zápotocký Military Acad., Brno, Czech.). *Jaderná energie* 6, 267-71 (1960).—The cation exchangers studied were: "P extra," a PhOH-CI₂O condensate with *p*-CH₃SO₃H groups (I); "YN," a condensate of phenolsulfonic and naphthalene-sulfonic acids with CH₂O (II); and "S," a sulfonated copolymer of styrene and divinylbenzene (III). In the expts., a 1-g. sample of the air-dried resin in the H form was allowed to swell in H₂O; then, while covered with H₂O contg. air, it was irradiated with γ -rays from Co⁶⁰ at intensities from near 5×10^4 to 10^4 rad/hr. for times up to 1600 hrs. After irradiation, the following properties were detd.: solv., or rather the rate of leaching of low-mol.-wt. compds., in 1*N* H₂SO₄; swelling capacity in H₂O; exchange capacity of strongly acid (SO₃H) and weakly acid (phenolic OH) groups by batch treatment with NaCl and NaOH soln., resp. The rate of leaching became linear with time of leaching after approx. 300 hrs.; it increased linearly with radiation dose, indicating chain degradation, but the points were scattered. Degradation was indicated also by the linear increase in the swelling capacity of II and III with dose (faster for III), whereas that of I did not change. The exchange capacity of the SO₃H groups decreased with the dose, slowly for I and II, rapidly for III. The exchange capacity of OH increased with the dose, even for III, which had none initially. The over-all exchange capacity of I and II increased, that of III decreased, with the dose. The radiation intensity had no effect on any of the properties. Direct action of the radiation split off SO₃H and OH groups, whereas the OH produced by the radiolysis of H₂O reacted with the resin to give more OH groups. The O₂ present in the H₂O gave rise to traces of peroxide which disappeared on further irradiation. Only about half of the SO₃H groups were accounted for as H₂SO₄ in soln.
 H. Nuscombe

6
 1-SAT(N)
 1-JAT(MAY)

2

BEDNAR, J.; TEPY, J.

Radiation chemistry of aqueous solutions of organic halogen derivatives.
III. Reactions caused by radiation of hydrogen peroxide in solutions
of chloroform and iron(II)-ions. Coll Cz chem 25 no.3:842-852 Mr '60.
(EEAI 9:12)

1. Militarische Akademie "A.Zapotocky" Brno (for Bednar). 2.
Jetzige Adresse: Institut fur Kernphysic, Tschechoslowakische Akademie
der Wissenschaften (for Teply)

(Halogens) (Organic compounds) (Radiation)
(Hydrogen peroxide) (Chloroform) (Iron)
(Ions) (Water) (Ions)

BEDNAR, J.

Reduction of iron (III)-salts through X rays in the presence of α,α' -dipyridyl. Coll Cs Chem 25 no.4:1104-1112 Ap '60. (EEAI 9:12)

1. Militarische Akademie "A. Zapotocky".
(Iron) (X rays) (Bipyridine)

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204130002-9

BEDNAR, J.

"Chemical reactions of ionizing-ray radiochemistry" by H. Mohler.
Reviewed by J. Bednar. Coll Cz Chem 26 no.10:2676-2677 O '61.

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204130002-9"

TAUER, Z.; DUHAJSKY, F.; BEDNAR, J.

Observation on the reaction of radical or excited water molecules
in the trace of ionizing particles. Coll Cs Chem 25 no.5:1391-
1396 My '60.

1. Militarische Akademie "A.Zapotocky", Brno.

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204130002-9

BEDNAR, J.

"Rapid radiochemical separations" by Y. Kusaka and W. Wayne-Meinke.
Reviewed by J. Bednar. Chem listy 56 no.11:1363 N '62.

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204130002-9"

BEDNAR, J.

"The radiochemistry of the transcurium elements" by G.H. Higgins.
Reviewed by J. Bednar. Chem listy 56 no.12:1457-1458 D '62.

JANOVSKY, I.; BARTONICEK, B.; BEDNAR, J.

Use of the aqueous solution of formic acid as chemical dosimeter.
Coll Cz Chem 28 no.8:2245-2246 Ag '63.

I. Institut fur Kernforschung, Tschechoslowakische Akademie der
Wissenschaften, Rez bei Prag.

BEDNAR, J.

Determination of iodine in biological material. Analytical review. Cesk. farm. 13 no.3:134-137 Mr'64.

1. Vyzkumny ustav endokrinologicky, Praha.

*

HEDNAR, J.

Condensed phase exposed to ionization radiation. Coll Oz Chem
29 no.1:88-96 Ja'64

1. Institut fur Kernforschung, Tschechoslovakische Akademie
der Wissenschaften, Rez bei Prag.

HEDNAR, J.; ROHLING, S.; VOHNOUT, S.

Contribution to determination of protein-bound iodine in the
blood serum. Cesk. farm. 13 no.4:203-209 My'64

1. Vyzkumny ustav endokrinologicky, Praha.

BEDNAR, Jaroslav

Energy distribution in the radiolysis of solutions. Pts. 1-2.
Jaderna energie 10 no. 5:173,174 My '64.

1. Institute of Nuclear Research, Czechoslovak Academy of
Sciences, Rez.

BEDNAR, J.

"Introduction to radiation chemistry" by Z. Spurny. Reviewed by
J. Bednar. Coll Cz Chem 30 no.1:352-353 Ja '65.

JANOVSKY, I.; BEDNAR, J.

Thermal and radiation stability of organic coolants. Pt.1.
Coll Cz Chem 30 no.3:900-903 Mr '65.

1. Institute of Nuclear Research of the Czechoslovak Academy
of Sciences, Rez near Prague. Submitted March 21, 1964.

L 61532-63 EWT(m) Peh CIAAP
ACCESSION NR: APS0170188

CC/0038/64/010/011/0408/0408

AUTHOR: Pigail, Zdenek; Vacek, Karel; Bednar, Jaroslav

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15

B

TITLE: Localization of energy in the radiolysis of solutions. Part 5. Degradation spectrum of electrons, electronic excitation spectra of the molecules, and the primary radiation chemical yield

SOURCE: Jaderna energie, v. 10, no. 11, 1964, 408

TOPIC TAGS: electros, electron spectrum, radiation chemistry

Abstract (authors' English summary): The number of particles excited in the primary action of electrons was derived as a function of the energy of these electrons (i.e. of the degradation spectrum of the electrons) and of the energy level to which the particles are excited in the interaction. Using the optical approximation it is possible to express the differential cross-section as a function of the oscillator strength of this excitation. This means that the primary

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L 61532-65

ACCESSION NR: AF5019186

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radiation chemical yield of differently excited particles (electronically excited particles, ions, etc.) depends on the electronic excitation spectrum of these particles. The limited validity of this approximation is discussed. It is shown that some very special properties of the radiolysis of mixtures, which are generally attributed to secondary chemical reactions of the primary products, can be explained by means of the differences in the electronic excitation spectra of the components. Report No 1075/64.

ASSOCIATION: Ceskoslovenské výzkumné ústav, Rez (Nuclear Research Institute of CSAV)

SUBMITTED: 00 INCL: 00 SUB CODE: NP, OP

NR REF Sov: 000 Cited: 000 JPRS

Card 2/2

BEDNAR, J.

CZECHOSLOVAKIA

URBAN, J; BEDNAK, J

Institute of Nuclear Research, Czechoslovak Academy
of Sciences, Rez near Prague - (for both)

Prague, Collection of Czechoslovak Chemical Commun-
cations, No 11, November 1966, pp 821-827

"Localization of energy in radiolysis of solutions.
Part 5: Formation of hydrogen and hydrogen chloride
in ternary mixtures of benzene, cyclohexane and
carbon tetrachloride."

BEDNAR, Jiri, inz.

Technical problems of the network for a second television
program in Czechoslovakia. Sdel tech 11 no.9:324-329 S '63.

FELT, V.; BEDNAR, J.

Protein-bound and inorganic iodine in serum of younger and older euthyroid subjects and changes following the administration of triiodothyronine. Rev. Czech. med. 11 no.4:238-245 '65.

1. Research Institute of Endocrinology, Prague (Director: Doc. K. Silink, M.D., D.Sc.).

SOUMAR, Josef; BEDNAR, Jiri; RÖHLING, Svatopluk

Determination of protein-bound iodine in thyroid function
tests. Vnitri lek. 11 no.11:1090-1096 N '65.

1. Vyzkumny ustav endokrinologicky v Praze (prednosta doc.
MUDr. Karel Silink, Dr.Sc.).

SOUMAR, Josef; ROHLING, Svatopluk; HEDNAR, Jiri

Comparison of protein-bound iodine values and the accumulation of I-131 during thyroid function tests. Vnitrní lek.
ll no.12:1164-1169 D 1' 65

1. Vyškumný ústav endokrinologický v Praze (prednosta:
doc. MUDr. Karel Silink, DrSc.).

L 39143-66

ACC NR: AP6030365

SOURCE CODE: CZ/0014/66/000/003/0085/0087

2/
B

AUTHOR: Bednar, Jiri

ORG: none

TITLE: Automation of television transmitters

SOURCE: Sdelovaci technika, no. 3, 1966, 85-87

TOPIC TAGS: TV transmitter, automation

ABSTRACT: The article discusses the many urgent problems which arise in the automation of television transmission, such as the obtaining and storage of a maximum of information about the course of the transmission, the organization of preventive maintenance and the prevention of interference. A model and a conception of the entire equipment are presented and discussed. Orig. art. has: 3 figures. [JPRS: 36,644]

SUB CODE: 17, 13 / SUBM DATE: none / ORIG REF: 002

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Card 1/1

0918 1043

BEDNAR, J.

CZECHOSLOVAKIA

SCHEINER, Z; JAROVSKY, I; BEDNAR, J.

Institute of Nuclear Research, Czechoslovak Academy of Sciences,
Rez near Prague - (for all)

Prague, Collection of Czechoslovak Chemical Communications,
No 1, January 1966, pp 43-50

"Localization of energy in radiolysis of solutions. Part 4:
Hydrogen yields in binary mixtures of ethanol, water and
pyridine."

SEDNAR, Jozef, doc. inz. CSc.

Model measurement of the state of stress of continuous plates supported pointwise. Inz stavby 13 no.4:170-177 Ap '65.

1. Chair of Construction Mechanics of the Faculty of Building of the Slovak Higher School of Technology, Bratislava.

BEDNAR, K.

"M.V.Lomonosov's activity and works on geography" by N.E.Dik.
Reviewed by K.Bednar. Sbor zem 68 no.3:272 '63.

BEDNAR, K.

"Political map of the world" by A.G.Siger [Siger, A.G.]. Reviewed
by K.Bednar. Sbor.zem 68 no.3:273 '63.

L 20243-66 EWT(1)/ETC(f)/EPF(n)-2/EWG(m) IJP(c) AT
ACC NR: AF5013935

SOURCE CODE: CZ/0055/65/015/005/0311/0232

AUTHOR: Bednar, L.

ORG: Institute of Plasma Physics, Czechosl. Acad. Sci., Prague

TITLE: Contribution to problem of interaction between h-f electromagnetic field
and plasma

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 15, no. 5, 1965, 325-332

TOPIC TAGS: magnetoactive plasma, magnetic anisotropy, plasma beam interaction,
electromagnetic field, electron collision, thermodynamic equilibrium, high frequency

ABSTRACT: Magnetoactive plasma is regarded as an anisotropic compressible dielectric.
A thermodynamic method is used to determine the interaction of plasma with an h-f
field fully penetrating it. Assuming isothermicity, the equilibrium state is
reached in the minimum of free energy. The case of cylindrical configuration
is solved in detail. The equilibrium plasma frequencies are determined. The
effect of electron collision frequency is analyzed. The author thanks all members
of the institute seminar for constructive criticism. Orig. art. has: 4 figures
and 15 formulas. (Based on author's abstract.)

SUB CODE: 20 / SUBM DATE: 17Sep64 / ORIG REF: 004 / OTH REF: 002 /

pu
Card 1/1

BEDNAR, Milan, inz.

The Novocherkassk method of continuous operational planning
of production. Podn org 19 no.4:155-159 Ap '65.

1. Research Institute of Mechanical Engineering and Economics,
Worksite Plzen.

L 4998-66 EWP(w)/EWP(i)/EWP(t)/EWP(k)/EWP(b)/ETC(m) JD/MM/EM

ACC NR: AP6000464

SOURCE CODE: CZ/0031/65/013/002/0085/0089

AUTHOR: Bednar, Milan (Engineer); Maslo, Vaclav (Engineer)ORG: Bednar VUSTE; Maslo ZVIL, n. p., Plzen

TITLE: Directions of the development of technique in the mechanical finishing of heavy workpieces

SOURCE: Strojirenska výroba, v. 13, no. 2, 1965, 85-89

TOPIC TAGS: industrial production, machine industry

ABSTRACT: The article points out shortcomings in present methods which cause low productivity and indicates the main directions of modernizing the finishing of heavy workpieces. Orig. art. has: 9 figures. [JPRS]

SUB CODE: GO / SUBM DATE: none

SC

Card 1/1

UDC: 621.9-181.2

0901 1246

BEDNAR, Milan, ina.; MASLO, Vaclav, in.z.

Development concept of the heavy workpiece machining technology.
Stroj vyr 13 no.2:85-89 F '65.

1. Research Institute of Mechanical Engineering and Economics,
Prague (for Bednar). 2. Zavody V.I.Lenina National Enterprise,
Plzen (for Maslo).

BEDNAR, Milan, inz.

Some experiences in analyzing technical and organizational standards of production at difficult worksites. Podn org 18 no.5:196-201 My '64.

1. Research Institute of the Machine Industry Technology and Organization.

BEDNAR, Milan, inz.; BAXOVA, Jarmila

Problems of technology standardization in heavy piece production.
Podn org 18 no. 6:255-258 Je '64.

1. Research Institute of Mechanical Engineering and Organization.

BELMAR, M.

Rulers of the air. p. 345. Words and pictures from the world of
fliers. p. 346.
(KRIDLA VLASTI, vol. 15, July 1955, Praha)

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 11,
Nov. 1955, Uncl.

BEDNAR, Otmar; MAGROT, Tomas

Apparatus for rapid determination of the mitotic index. Plzen.
lek. sborn. 23:97-99 '64

1. Ustav pro lekarskou biologii lekarske fakulty University
Karlovych se sidlem v Plzni (prednosta: MUDr. T. Magrot, CSc.)

BEDNAR, O.; VASULIN, M.

Effect of gastric resection on the biliary tract. Rozhl. chir. 40
no.8:508-512 Ag '61.

1. II chirurgicka klinika v Brne, prednosta prof. MUDr. Jan Navratil,
(GASTRECTOMY) (BILIARY TRACT physiol)

NAVRATIL, J.; BEDNAR, O.; BEDNARIK, B.; OLEJNIK, O.; SUMBERA, J.; KANIA, H.

Surgical correction of congenital heart defects with open heart surgery. Cesk. pediat. 19 no.6:481-489 Je '64.

1. II. chirurgicka klinika (prednosta: prof. dr. J. Navratil, DrSc.), I.detska klinika (prednosta: prof. dr. Z. Brunecky), II. detska klinika (prednosta: prof. dr. M. Toman) lekarske fakulty UJEP (University J.E.Purkyne), Brno.

OLEJNIK, O.; VASULIN, M.; BEDNAR, O.

Our experiences with the surgical treatment of total atrio-
ventricular block. Rozhl. chir. 44 no.1:8-15 Ja '65

1. II. chirurgicka klinika lekarske fakulty University
J.E. Purkyne v Brne (prednosta: prof. dr. J. Navratil, DrSc.)

MAGROT, T.; FAKAN, F.; BEDNAR, O.

The observation of extrusion of nucleolar substantion in He La cells. Cesk. morf. 13 no.3:239-245 '65.

1. Institute of Biology, Medical Faculty of Charles' University in Plzen, Czechoslovakia.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Application. Ceramics. Glass. Binding Materials. Concrete. - Ceramics.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 76406.

Author : Turok, Miroslav., Bednar, Stanislav.

Inst : Not given.

Title : Thermochemical Processes in Combustion. Calculation of Maximum Theoretical Temperature of Flame.

Orig Pub: Sklar a keramik, 1957, 7, No 8, 233-234.

Abstract: The following is presented: an example of calculation of the temperature of combustion of generator gas in the theoretical amount of air and in the cases of 10, 20, 30, 40, 50, and 60% of excess air or gas in relation to the theor-

Card 1/2

31

BEDNAR, Zdenek, inz.; HOSEK, Emil, inz.; RAYNOCH, Bedrich

Contribution to the information on fir regression in the
former Olomouc region. Les cas 9 no.7:649-672 Jl'63.

I.. Ustav pro hospodarskou upravu lesu, pracoviste Olomouc.

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204130002-9

BEDNARCZYK, A., mgr inz.

Basic problems of mechanization and automation of assembling.
Techn motor 12 no. 9: 319-321 S '62.

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204130002-9"

BEDNARCYK, Stefan, Mgr. ins.

Elastoplastic model tests as applied to the determination of stress
distribution in hydrotechnic constructions. Archiw hydrotech 8
no.1:77-104 '61. (EEAI 10:9)

1. Starszy asystent Katedry Budownictwa Wodnego Politechniki Gdańskiej.
(Hydraulic models) (Hydraulic engineering)

Country	:	Czechoslovakia	R-13
Category	:		
Abs. Jour.	:		39354
Author	:	<u>Bednar, S.</u>	
Institut.	:	Not given	
Title	:	The Control and Regulation of Firing Processes in Ceramic Factories	
Orig Pub.	:	Automatisace, No 9, 286-293 (1958)	
Abstract	:	The author discusses the firing of electrotechnic ceramic wares and proposes improvements consisting in the installation of control instruments in old-type circular kilns as well as gives instructions on the reconstruction of existing continuous kilns in order to permit the introduction of automatic controls, using instruments of Czech manufacture. Author's summary	
Card:	1/1		

BEDNARA, B.; RASHKA, K.; ROTTA, I.

"Experimental study of streptococcus infections and their sequelae."

Report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists, and Infectionists. 1959

BEDNAREK, Stanislaw; OSTROWSKI, Adam; TERTIL, Zbigniew

Testing and evaluation of Polish-made PYORd metallurgic generators. Przegl elektrotechn 39 no.3:117-119 Mr '63.

1. Zaklad Maszyn Elektrycznych, Akademia Gorniczo-Hutnicza,
Krakow (for Bednarek and Tertil) 2. Zaklad M-5, Wrocław
(for Ostrowski).

BEDNARCZYK, A.

"Technology and Machines for the Manufacture of Globoid Gears" p. 46 (Technika Motoryzacyjna, Vol. 3, No. 2, Feb. 1953, Warszawa)

SO: Monthly List of East European Acquisitions, Vol. 3, No. 2, Library of Congress, February, 1954, Unclassified.

BEDNARCZYK, A.

"Bimetal Parts made of Powdered Metals" p. 82 (Technika, Motoryzacja, Vol. 3, No. 3, March, 1953, Warszawa)

SO: Monthly List of East European Accessions, Vol. 3, No. 2, Library of Congress, February, 1954, Uncl.

BEDNARCZIK, A.

"Standardization of Technological Processes" p. 104 (Technika Motoryzacyjna,
Vol. 3, No. 4, April, 1953, Warszawa)

SO: Monthly List of East European Accessions, Vol. 3, No. 2, Library of Congress,
February, 1954, Uncol.

BEDNARCZYK, A.

Completion of the planned tasks of the State Enterprise
Petroleum Mining in Krosno. Wiad naft 8 no.4/96 Ap '62.

BEDNARCZYK, H.

The coloring of sheep pelts.

Ap. 198 (Przeglad Skorany. Vol. 11, no. 8, Aug. 1956, Lodz. Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, No. 2
February 1958

BARTKOWIAK, Edmund; BEDNARCZYK, Janusz

Cavernous angioma of the spine complicated by compression vertebral fracture. Chir. narzad. ruchu ortop. Pol. 29 no.3: 393-396 '64.

1. Ze Szpitala Ortopedycznno-Urazowego im. Z. Rądlinskiego w Łodzi (Dyrektor: doc. dr. med. E. Bartkowiak).

P/014/61/040/005/002/002
D227/D305

AUTHORS: Obłój, Józef, Nowakowska, Maria, and Bednarczyk, Julita

TITLE: Effects of impurities on the polymerization of ethylene without pressure

PERIODICAL: Przemysł chemiczny, v. 40, no. 5, 1961, 269-272

TEXT: The effects of C₂H₂, O₂, CO, CO₂, Et₂O and moisture impurities were studied to determine the permissible concentrations of these compounds when polymerization is catalyzed by organometallics. Very little data are to be found in pertinent, technical literature. According to K. Ziegler (Ref. 1: Die Makromolekulare Chemie (Macromolecular Chemistry), 18/19, 186, 1956), organometallic catalysts are poisoned by CO and C₂H₂; D.S. Breslow (Ref. 2: J.A.C. S., 79, 5072, 1958) using dicyclopentadienyl dichloro-titanium/diethyl chloro-aluminum as catalyst found that traces of oxygen facilitate polymerization of ethylene, and A.V. Topchiyev, B.A.

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6



Effects of impurities on ...

P/014/61/040/005/002/002
D227/D305

Krentsel', and L.G. Sidorova (Ref. 3: DAS USSR, 128, 732, 1959) discovered a similar effect with propylene and a $\text{Al}(\text{Et})_3/\text{TiCl}_4$ catalyst. Organic derivatives of aluminum are attacked by moisture and oxygen. The apparatus employed in the present work is shown in Fig. 1. Standard ethylene, ($> 99.0 \text{ C}_2\text{H}_4$, $< 0.01 \text{ O}_2$, 0.0095 CO , $< 0.001 \text{ C}_2\text{H}_2$, < 0.02 ethers and $< 0.045\%$ of water, by weight), was mixed with each impurity in turn and passed into the polymerizing chamber containing a solution of the catalyst ($\text{Al}(\text{Et})_2\text{X}$ and TiCl_4 , where $\text{X} = \text{Cl}$ or Br) in benzene. The molar ratio Al:Ti was chosen to yield polyethylene with a reduced viscosity value ($\eta_{\text{red.}}$) equal to $2\text{X} \cdot \eta_{\text{red.}}$ is defined by

$$\eta_{\text{red.}} = \frac{\eta_{\text{solution}} - \eta_{\text{solvent}}}{\eta_{\text{solvent}} \cdot C}$$

where C = concentration in g/100ml = 0.5. The overall concentration of the catalyst was 0.18 - 0.50% by weight. The qualities measured were the decrease in $\eta_{\text{red.}}$, changes in polymer yield and

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Effects of impurities on ...

P/014/61/040/005/002/002
D227/D305

the relative consumption of catalyst, a , defined by the ratio of catalyst consumption in the particular experiment to that in polymerization of standard ethylene without any additions. The effect of acetylene impurities was studied in two series of experiments, varying concentration of the catalyst and the ratio $\text{Al}(\text{Et})_2 \text{Br} : \text{TiCl}_4$. Catalyst consumption increases gradually with increasing C_2H_2 content, while η_{red} falls rapidly for up to 0.066 % C_2H_2 (by 63 %) and is little affected thereafter. The results are shown in Table 1 and Fig. 2. Effects of oxygen were studied with an 0.5% solution of the catalyst (by weight) and Al equalled 1.7 moles/mole Ti .

(Table 1 and Fig. 3). Up to ~ 0.066 %, oxygen has little effect on a , but the latter increases considerably at 0.24 % O_2 and at 0.66% O_2 the reaction is practically inhibited. η_{red} decreases more slowly than with increasing acetylene content. From Table 1 and Fig. 4 it may be seen that pure, dry carbon monoxide has practi-

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Card 4/4

Effects of impurities on ...

P/014/61/040/005/002/002
D227/D305

cally no effect on α or η_{red} . within the limits of 0.01 - 0.1 %. On increasing the CO content to 0.57 % α is doubled and η_{red} . falls by 23 %. High concentrations of CO (1.5 %) increase α by a factor of 5 but do not inhibit the polymerization. Carbon dioxide had no effect on α and η_{red} ., although the reaction appeared to be facilitated at 0.66 % CO₂ (Fig. 5).

Fig. 5. Effect of carbon dioxide on the polymerization of ethylene.

Légend: 1 - Relative consumption of catalyst; 1a - reduced viscosity; 2 - % CO₂; 3 - η_{red} .

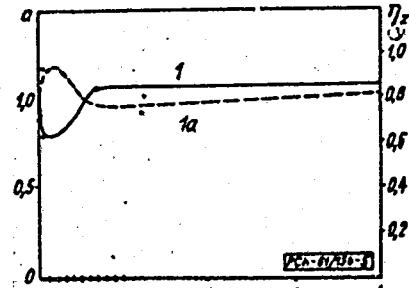


Fig. 5.

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Card 9/14

② DWUTLENEK WĘGLA, %
Rys. 5. Wpływ dwutlenku węgla na polimerzację etylenu: 1 - zużycie katalizatora w stosunku do zużycia katalizatora na standardowym etylenie, 1a - lekkość zredukowana

Effects of impurities on ...

P/014/61/040/005/002/002
D227/D305

The relative consumption of the catalyst is practically unaffected by ~0.1 % but is doubled by 0.18 % Et₂O, and 0.8 % ether stopped the reaction. Reduced viscosity decreased only slowly with increasing ether content (by 24 % at 0.82 % Et₂O). Quadrupling the moisture content of ethylene raised $\eta_{red.}$ by a factor of 5 and reduced $\eta_{red.}$ by 30 % (Table 2 and Fig. 7), as well as promoting ash formation with the polymer. The authors admit that the results of Breslow (Ref. 2: Op.cit.) and Topchiyev (Ref. 3: Op.cit.) have not been confirmed, possibly due to differences in the monomers, catalysts and methods. Catalyst concentrations within 0.18 - 0.50 % by weight are sufficient to polymerize ethylene efficiently, even in the presence of 0.01 % C₂H₂, 0.02 % O₂, 0.1 % CO, 0.15 % ethers and 0.05 % of water.

5/6
Card 1244

Effects of impurities on ...

P/014/61/040/005/002/002
D227/D305

There are 2 tables, 7 figures and 3 references: 1 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: D.S. Breslow, J. Am. Chem. Soc., 79, 5072 5072, 1958.

ASSOCIATION: Zakład olefin instytutu ciężkiej syntezy organicznej, blachownia Śląska (Olefin Department of the Heavy Organic Synthesis Institute, Silesia Sheet-Iron Works)

Card 1474

BEDNARCZYK, M.

"I have my own grass seeds." p. 24
(Plon, Vol 4 No 1 Jan 53 Warszawa)

SO: Monthly List of East European Accessions, Vol 2 No 9 Library of Congress Sept 53 Uncl

BEDNARCZYK, M.

A contribution to the problem of lining chutes. p. 18.
BUDOWNICTWO PRZEMYSLOWEGO. (Ministerstwo Budownictwa Przemyslowego) Warszawa,
Vol. 4, No. 10, Oct. 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress.
No. 7, Vol. 5, July 1956.

L 00917-67 EWP(j) MM/JM/RM

ACC NR: AF6035461 (N)

SOURCE CODE: P0/0099/66/040/004/0631/0636

35
B

Bednarczyk, Mieczyslaw and Okon, Kazimierz of the Military Technical College
(Wojskowa Akademia Techniczna) Warsaw.

"Nitration of Benzene, Naphthalene and Phenol with Silver and Potassium
Nitrates in the Presence of Some Inorganic and Organic Acid Chlorides".

Warsaw, Roczniki Chemii, Vol 40, No 4, 1966, pp 631-636.

Abstract (Authors' English abstract): Benzene, naphthalene, and phenol were
acted upon with AgNO_3 and KNO_3 in the presence of SiCl_4 , SnCl_4 , PCl_5 , AsCl_3 ,
 SbCl_3 , SbCl_5 , SO_2Cl_2 , SOCl_2 , $\text{C}_6\text{H}_5\text{SO}_2\text{Cl}$, ICl , CH_3COCl and $\text{C}_6\text{H}_5\text{COCl}$. It
was found that the chlorides used catalyse the process of nitration with
silver and potassium nitrates. Orig. art. has: 2 tables. (JPRS; 36,862)

TOPIC TAGS: nitration, benzene, naphthalene, phenol

SUB CODE: 07 / SUBM DATE: 02 Jul 65 / ORIG REF: 004 / OTH REF: 007
SOV REF: 002

Cord 1/1 bkh

1021 2179

BEDNARCZYK, R.

Hydraulic drive and control of crane mechanisms. p. 527.

PRZEGLAD MECHANICZNY. (Stowarzyszenie Inżynierów i Techników Mechaników Polskich) Warszawa, Poland, Vol. 18, no. 16, Aug. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 1, Jan. 1960.

Uncl.

BEDNARCZYK, S.

TECHNOLOGY

PERIODICAL: GOSPODARKA WODNA. Vol. 18, no. 6, June 1958

BEDNARCZYK, S. Ustie Dam on the Orava River in Czechoslovakia. p. 241

Monthly List of East European Accessions (EEAI) I.C Vol. 8, no. 4.

April 1959, Unclass

BEDNARCZYK, Stefan, mgr., ins.

- Notes on investigations ~~samples~~ of tensions in the dam by the elastooptical method. Gosp wodna 22 no.2:54-56 F '62.
- 1. Katedra Budownictwa Wodnego Politechniki Gdańskiej

BEDNARCZYK, Stefan, dr inz.

Discharge of water from under the weir gate. Gosp wodna 24
no. 4:128-130 Ap '64.

1. Department of Hydraulic Construction, Technical University,
Gdansk.

BEDNARCZYK, Stefan, mgr inz.; MACKIEWICZ, Stefan, mgr inz.

Application of elastooptics to hydraulic engineering in
Yugoslavia. Gosp wodna 23 no. 10:387-391 0 '63.

1. Technical University, Gdansk.

Biednarski
SEIDLER, Maksymilian; BIEDNARZKI, Maciej

Recent views on the behavior of the adrenal cortex in normal & toxemic pregnancies. Polski tygod. lek. 13 no.6:226-229 10 Feb 58.

1. Z II Kliniki Polonictwa i Chorob Kobiecych A. M. w Krakowie;
kierownik: prof. dr Maksymilian Seidler. Adres: Krakow, ul. Dluga 37.
(PREGNANCY, physiol.

adrenal cortex, comparison with toxemic pregn. (Pol))
(PREGNANCY TOXEMIAS, physiol.

adrenal cortex, comparison with normal pregn. (Pol))
(ADRENAL CORTEX, physiol.

in normal & toxemic pregn., comparison (Pol))

BC

Absorption of ultra-violet light by some organic substances. XLIII. W. BEDNARECKI and L. MARCHEWSKI. XLIV. R. GRINBAUM and L. MARCHEWSKI. XLV. Derivatives of phenanthrene and indole. R. GRINBAUM and L. MARCHEWSKI. XLVI. W. BEDNARECKI and L. MARCHEWSKI (Bull. Acad. Polonaise, 1937, A., 140-153, 156-170, 171-184, 187-200; cf. A., 1937, I, 343).—XLIII. The existence of continuous or banded absorption spectra is applied to determine the presence of the alko- and keto-groups, respectively, in various sugars. Fructose, in aq. and MeOH solutions, shows a banded absorption (max. 2800 Å.); melibiose, maltose, cellobiose, and trehalose in aq. solution all show continuous absorption which changes to a band absorption in the presence of alkali ($p\ddot{H}$ 11-13). The derivatives of glucose with ring structures all show continuous absorption.

XLIV. The absorption spectra (3200-4000 Å.) for aq. solutions of aspartic, glutamic, and kynurenic acids, cystine, creatine, creatinine, uracil, and EtOH solutions of piperonylic acid, piperonal, and the nitro-anilines are examined and the extinction coeffs. given. The effects of free H⁺ and OH⁻ ions are described.

XLV. The spectrum of phenanthrene, in EtOH solution, shows maxima at 2518 and 2637 Å. The tetrahydrophenanthrene (in EtOH) show maxima at 2287 and 2325 Å., 2243 and 2363 Å. for compounds with b.p. 316° and 307°, respectively. The 2-, 3-, 4-, and 9-NO₂-derivatives show, in addition to a max. at about 2340 Å., a broad band between 3100 and 3800 Å. Orthochlorophenanthrene shows a spectrum similar to those of the NO₂-compounds, whereas that of dibromophenanthrene is very similar to that of the hydrocarbon. All the indole derivatives show similar spectra with absorption maxima in the regions 2900 and 2900 Å.

XLVI. The spectra of 8-hydroxyquinoline, COPh₃, and its oxime, allyl alcohol, linalool, and geraniol in EtOH solution; farnesol, o,p-tolylbenzoic acid and its oxime in EtOH solution; diketopiperazine in aq. solution, and phytol in EtOH-Et₂O solution are described.

K. S.

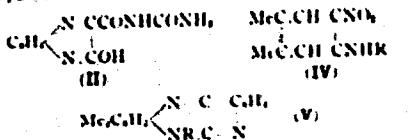
BC

Absorption of ultra-violet light by fluorocycles and products of its transmutations.
W. BERNARDZIK and L. GMIK (Bull. Acad. Polonaise, 1937, A, 435-461).—The ultra-violet absorption spectra of fluorocyclohexene and its H_1 , H_2 , and H_{12} -derivatives, diacronaphthalidene, and decacyclene have been measured. All show selective absorption and obey Beer's law, the spectrum of the parent hydrocarbon being less continuous than those of the hydrogenation products.

P. J. L.

Absorption of ultraviolet light by some organic substances. **XLIX.** **W. J. Beddoe** and **L. Marchlewski**. *Bull. intern. acad. polon. sci. Cl. II. Class. sci. math. nat.* **1938A**, **534-541** (in English) (Publ. 1939); cf. *C. A.* **32**, **4129**.—Substances purified by extr. with CHCl_3 in a Soxhlet app. and recrys. from MeOH and H_2O shows selective absorption max. $2780-2840 \text{ \AA}$, $\log \epsilon = -0.9$, similar to that of the paired precip. of levulose (*C. A.* **32**, **15761**). In aq. soln. at least part of the ketone has a ketonic structure. Glucosone shows a max. at 2875 \AA , $\log \epsilon = 1.52$, and min. 2610 \AA , $\log \epsilon = 1.04$, in agreement with the presence of a $\text{C}=\text{O}$ group. The results are approximate absolutely pure glucosone has not been obtained. Curves and numerical data are given. L. AF 906. *Ind. Eng. Chem.* **31**, **2427**.—The curve of glucose (I) in neutral soln. is practically identical with that in 5% HCl, i.e., it has the same constitution in both media and the formation of the ureide (II), m. $238-9^\circ$, with $\text{e-Citr.} (\text{NH}_3)_2\text{HCl}$ in the presence of excess NaOAc must take place in 2 steps: (1) reaction with 1 amino group, (2) opening of the aldehyde ring and reaction with the 2nd amino group. The wave lengths in \AA and $\log \epsilon$ of the 2 max. of II in aq. neutral soln. are: $3010, 3.02$; $3475, 3.20$ min.; $2780, 3.28$; $3570, 3.16$. In alk. soln. the absorption is similar but only 1 max. and min. appears. For allantoin formed from I and $\text{e-Citr.} (\text{NH}_3)_2$, in acid soln. the values are: 3 max., $2545, 4.65$; $3510, 3.65$; $3800, 3.20$; 3 min., $2255, 3.96$; $3080, 3.38$; $3380, 3.41$. *Indophenol* (III), m. $265-7^\circ$, from isatin and $\text{e-Citr.} (\text{NH}_3)_2$,

shows 3 max. in alk., 3035, 4,53; 3570, 4,14; 3970, 3,51; and 3 min., 2440, 3,06; 2850, 3,17; 3810, 3,83. *N*-Aminophenylideneacrylylamine, m. 238°-239°*, formed along with III in the above reaction and prep'd. quantitatively from acrylylamin and ω -C₆H₅NH₂, and the product saponified, shows 2 max. (alk.) 3035, 3,65; 3535, 3,61; and 2 min., 2700, 3,63; 3230, 3,08. The spectrum is similar to that of the constitutionally similar II. A substance constitutionally similar to vitamin B₆ was isolated from IV (R = $\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{CH}_2\text{COO}$) by reducing the NO₂ with Zn and AcOH, filtering off the Zn, adding an equimol. amnt. of barium in glacial AcOH, heating 2 hrs. on the water bath, dig. with H₂O and adding NaOH. The gelatinous ppt. was filtered, washed with H₂O and dissolved in 0.05 N HCl, filtered and reprecipitated with NaOH giving V, which could not be crystallized but was dried to const. wt. and analyzed. Its spectrum gives 2 max. 2260, 4,52; 3770, 4,14; and 3 min., 2410, 3,75; 3190, 3,21; 4120, 2,91.



Janet N. Austin

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204130002-9"

QA 12

The choline content of some of the food products on the market in Poland. W. Bednarek - (Gdansk, Poland). Kortnik. Podlaskiego 22/2000, Vol. 1, 225-234 (1981). The food products tested were divided into 3 categories according to the choline content: (1) 0-31 mg. %, (2) 31-100 mg. %, and (3) greater than 100 mg. % of choline. To category (1) belonged dry cheese (16.0 mg. %), potatoes (14.4 mg. %), carrots (11.6 mg. %), and cabbage (19.1 mg. %). To the second class belonged beef (12.2 mg. %), beef blood (31.3 mg. %), garlic sausage (61.6 mg. %), fish (10) mg. %, flour (35-40 mg. %) and its baked products (21.74 mg. %), and macaroni (63.6 mg. %). Finally to group (3) were assigned veal (112 mg. %), pork (104 mg. %), lamb (100 mg. %), beef liver (455 mg. %), veal liver (530 mg. %), pork (447 mg. %), egg yolks (1700 mg. %), bacon (169.3 mg. %), peas (168 mg. %), and yeast (103 mg. %). It was likewise shown that boiling or frying the various foods had no apparent effect on the choline content.

L. J. Piotrowski

✓

BEDNARCZYK, Wladyslaw

POLAND/Chemical Technology - Chemical Products and Their
Application. Food Industry

I-26

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 13888

Author : Bednarczyk Wladyslaw

Title : Newest Achievements In the Production of Potable Milk

Orig Pub : Najnowsze osiągnięcia w zakresie produkcji mleka spożywczego. Przegl. mleczarki, 1955, 3, No 9, 17-18

Abstract : Description of the most up-to-date methods of shipping,
storage and pasteurization of milk.

Card 1/1

- 403 -

POLAND / Chemical Technology. Chemical Products and H
Their Applications. Food Industry.

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 13598.

Author : Bednarczyk, Wladyslaw; Lewandowska, Blandyna;
Krzyczanowska, Maria.

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Title : Determining Lactose in Technical Lactose and Whey
as Well as Determining Lactose and Saccharose in
Condensed Milk with Sugar.

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Abstract: Determinations were made of lactose in whey and
technical lactose, and in condensed milk with
sugar, by the Bertrand, colorimetric with picric
acid, colorimetric with enthone, and polarometric
methods. By statistical treatment of the results,
it was established that the Bertrand method can be

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